

What is claimed:

1. A method for the manufacture of a relatively non-corrosive aluminum sulfate which comprise
  - (a) introducing and mixing an alkali into a solution of aluminum sulfate having a concentration of between about 82% to 97% by weight and in sufficient amounts and such that when the alkali is substantially dissolved, the pH of the solution yields a polyaluminum sulfate product having an elevated cationic charges of at least 5, and
  - (b) filtering the polyaluminum sulfate reaction product.
2. The method of Claim 1 wherein the quantity of alkali introduced and mixed into the aluminum sulfate solution comprises from about 3% to about 15% by weight of the aluminum sulfate.
3. The method of Claim 1 wherein the alkali is soda ash.
4. The method of Claim 1 wherein the alkali is lime.
5. The method of Claim 4 wherein the lime is hydrated lime or lime.
6. The method of Claim 1 wherein the alkali is sodium hydroxide.
7. The method of Claim 1 wherein the alkali is sodium bicarbonate.
8. The method of Claim 1 wherein the alkali is a blend of sodium carbonate and lime.
9. The method of Claim 1 wherein the solution of aluminum sulfate has a concentration of between about 85% to about 97% by weight and the alkali comprises between about 3% to 15% by weight.
10. The method of Claim 9 in which the alkali is soda ash and wherein about 1.0% phosphoric acid is added.

11. The method of Claim 10 in which the alkali is soda ash and wherein 1.0% to about 3% phosphoric acid is added.
12. A relatively non-corrosive aluminum sulfate product comprising the reaction product of between about 85% to about 97% by weight of aluminum sulfate and between about 3% and about 15% by weight of an alkali.
13. The product of Claim 12 in which the alkali is soda ash.
14. The product of Claim 12 in which the alkali is lime or soda ash.
15. The product of Claim 14 in which the reaction product incorporates from about 0.5% to about 5% by weight of phosphoric acid.